Remarks

Applicants appreciate the Examiner's indication that claims 8-21 are allowable and that claims 3, 24, 32, and 34 would be allowable if rewritten in independent form including all of the limitations of their base claims and intervening claims. Additionally, in the Office Action of November 30, 2004, the Examiner objected to claim 32 as containing a typographical error and rejected claims 1, 2, 4-7, 22, 23, 25-31, 33, and 35 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,667,993 to Lippett et al. (Lippett).

By this amendment, Applicants have amended claims 1, 22, 29, 30, and 33. Claims 4, 25, 32, and 34 have been canceled without prejudice or disclaimer. Claims 1 and 22 have been amended to further define certain features. Support for the amendments to these claims can be found, for example, in canceled claims 4 and 25 and in paragraph 35 of the originally filed specification. Claims 30 and 33 have been amended to incorporate the features previously recited in dependent claims 32 and 34 (now canceled). Claim 39 has been amended to improve form.

In view of the amendment to claims 30 and 33, Applicants submit that these claims are now allowable, as these claims now incorporate the features from claims 32 and 34 which the Examiner has indicated as being allowable. Accordingly, the rejection of claims 30 and 33, and their dependent claims 31 and 35, is traversed. Additionally, the objection to claim 32 is also traversed.

Claims 1, 2, 4-7, 22, 23, and 25-29 stand rejected under 35 U.S.C. § 102(e) based on Lippett. Applicants respectfully traverse this rejection.

Claim 1, as amended, is directed to a communication method including, receiving data from a first plurality of data lines, each data line providing data at a predetermined rate; serializing the received data; and providing the serialized data over a link. The method of claim 1 further includes deserializing the serialized data to create deserialized data using a clock signal having a phase determined based on edges in the serialized data that occur at least once every other cycle of the clock signal. The deserialized data is provided to a second plurality of data lines corresponding to the first plurality of data lines.

Applicants submit that Lippett does not disclose each feature of claim 1. For example, Lippett does not disclose "deserializing the serialized data to create deserialized data using a clock signal having a phase determined based on edges in the serialized data that occur at least once every other cycle of the clock signal." Claim 1, as amended, includes certain features similar to those previously recited in claim 4. In rejecting claim 4, the Examiner points to column 11, lines 5-9 of Lippett. (Office Action, page 3).

Lippett is directed to a communication channel having a number of data links for transferring a plurality of sub-streams of data in a parallel fashion. (Lippett, Title and Abstract). Column 11, lines 5-9 of Lippett describes the clock recovery circuit 704 of Lippett. In particular, this section of Lippett states: "[c]lock recovery circuit 901 then compares edge transitions on received data sub-stream 904 to each of clock phase signals 902(i) and selects a clock phase signal that is most in correspondence with the received data sub-stream." Although this section of Lippett describe clock recovery from a data stream, neither this section

of Lippett, nor any other section of Lippett, discloses, as is recited in claim 1, a clock signal having a phase determined based on edges in the serialized data that occur at least once every other cycle of the clock signal.

Lippett discloses additional details relating to edge transitions for clock recovery in column 6. This column of Lippett states, in part: "[i]t is desirable to provide scrambling on the data to reduce EMC and provide sufficient edge density to ensure a low cost local oscillator may be used generate the reference clock in an embodiment which uses a clock recovery device." Thus, Lippett specifically discloses using "scrambling" to provide sufficient edge density. Lippett does not, however, disclose any particular edge density that is provided by the scrambling. Accordingly, Applicants submit that Lippett does not disclose or suggest, as recited in claim 1, deserializing the serialized data to create deserialized data using a clock signal having a phase determined based on edges in the serialized data that occur at least once every other cycle of the clock signal.

For at least these reasons, Applicants submit that claim 1, as amended, is not disclosed or suggested by Lippett and the rejection of this claim should therefore be withdrawn. The rejection of dependent claims 2 and 5-7 should also be withdrawn, at least by virtue of the dependency of these claims from claim 1.

Independent claim 22 and its dependent claims 23 and 25-29 were also rejected under 35 U.S.C. § 102(e) based on Lippett. Claim 22, as amended, is directed to a communication system comprising a number of elements, including, *inter alia*, means for serializing received data and means for generating a clock

signal based on the serialized data by synchronizing a phase of the clock signal based on edges in the serialized data that occur at least once every other cycle of the clock signal. Applicants submit that Lippett does not disclose or suggest the features of claim 22. Lippett, for instance, does not disclose or suggest means for generating a clock signal based on the serialized data by synchronizing a phase of the clock signal based on edges in the serialized data that occur at least once every other cycle of the clock signal, as recited in claim 22. Arguments similar to those made above for claim 1 also apply to claim 22.

For at least these reasons, Applicants submit that the rejection of claim 22 is improper and should be withdrawn. The rejections of claims 23 and 25-29, at least by virtue of their dependency on claim 22, are also improper and should be withdrawn.

In view of the foregoing amendments and remarks, Applicants respectfully request the Examiner's reconsideration of this application, and the timely allowance of the pending claims.

To the extent necessary, a petition for an extension of time under 37 CFR 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1070 and please credit any excess fees to such deposit account.

Respectfully submitted,
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